

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte ROBERT H. JOHNSTONE

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Appeal No. 1997-2839  
Application No. 08/448,778

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ON BRIEF

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Before STONER, Chief Administrative Patent Judge, COHEN and LAZARUS, Administrative Patent Judges.

LAZARUS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 16-35 under 35 U.S.C. § 103.<sup>1</sup>

We reverse.

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<sup>1</sup>Claims 16 and 28 were amended (Paper Nos. 13 and 17 received December 2, 1996 and May 2, 1997, respectively) after the final office action (Paper No. 7 mailed August 1, 1996).

BACKGROUND

The appellant's invention relates to an apparatus for high speed transfer of colored or metallic foil onto printing (specification, p. 1). Independent claim 16 is representative of the subject matter on appeal and a copy thereof is set forth in the appendix to the appellant's brief.<sup>2</sup>

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Nelson	4,724,026	Feb. 09, 1988
Marazzi et al. (Marazzi '467)	4,760,467	Jul. 26, 1988
Hanson et al. (Hanson)	5,030,977	Jul. 09, 1991
Nubson et al. (Nubson)	5,037,216	Aug. 06, 1991
Nyfeler et al. (Nyfeler)	5,207,855	May 04, 1993
Marazzi et al. (Marazzi '684)	5,275,684	Jan. 04, 1994

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<sup>2</sup>In claim 16, line 1 (appendix, page 19) "leat" should be "least" (see Paper No. 17, amendment filed May 2, 1997). Claim 18 (appendix, page 20) incorrectly recites "foils trip," "foil strip" is correct as per original claim 18 of record. Claim 28 recites "means for essentially" (appendix, page 21), whereas claim 28 of record has been amended to recite "means before essentially" (Paper No. 17, amendment filed May 2, 1997). It is apparent that the amendment (Paper No. 17) was in error in not changing the language of claim 28 to what was intended, i.e., the language in the appendix. For purposes of this appeal we understand the language at issue to be "means for essentially." During further prosecution before the examiner an appropriate rectifying amendment should be submitted.

Appeal No. 1997-2839  
Application No. 08/448,778

The following rejections are before us for review.<sup>3</sup>

Claims 16, 24 and 25 stand rejected under 35 U.S.C. § 103 as being unpatentable over Marazzi '684 or Marazzi '467 in view of Hanson.

Claims 16 and 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Marazzi '684 or Marazzi '467 in view of Nelson.

Claims 18 and 19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Marazzi '684 or Marazzi '467 as applied above, and further in view of Nubson.

Claim 20 stands rejected under 35 U.S.C. § 103 as being unpatentable over Marazzi '684 or Marazzi '467 in view of Nyfeler.

Claims 21-23 and 32 stand rejected under 35 U.S.C. § 103 as being unpatentable over Marazzi '684 or Marazzi '467 in view of Nelson and Nyfeler.

Claims 33 and 34 stand rejected under 35 U.S.C. § 103 as being unpatentable over Marazzi '684 or Marazzi '467 in view of Nyfeler and Nubson.

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<sup>3</sup>The ground of rejection of claims 16-35 under 35 U.S.C. § 112, second paragraph, (answer, page 5) has now been withdrawn. See the examiner's communication of May 21, 1997 (Paper No. 18).

Appeal No. 1997-2839  
Application No. 08/448,778

Claims 26 and 27 stand rejected under 35 U.S.C. § 103 as being unpatentable over Marazzi '684 or Marazzi '467 in view of Nubson and Hanson.

Claims 28-31 and 35 stand rejected under 35 U.S.C. § 103 as being unpatentable over Marazzi '684 or Marazzi '467 in view of Nelson, Nyfeler and Hanson.<sup>4</sup>

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 15, mailed March 4, 1997) for the examiner's complete reasoning in support of the rejections, and to the appellant's brief (Paper No. 14, filed December 2, 1996) and reply brief (Paper No. 16, filed May 2, 1997) for the appellant's arguments thereagainst.<sup>5</sup>

#### OPINION

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<sup>4</sup>Nyfeler is applied by the examiner in the final rejection (Paper No. 7), but not mentioned in the grounds of rejection (answer, page 13).

<sup>5</sup>We acknowledge appellant's mention (brief, pages 12-13) of Nelson in the context of the July 18, 1995 Decision of the Board of Patent Appeals and Interferences in the parent application (application No. 07/829,247). However, Nelson was applied differently and the present circumstances involve different claimed subject matter and different prior art.

Appeal No. 1997-2839  
Application No. 08/448,778

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

We cannot sustain the examiner's rejections of appellant's claims 16-35 under 35 U.S.C. § 103.

For purpose of our review we focus on claim 16, the sole independent claim.

Claim 16 recites:

16. Apparatus for producing a printed substrate web at speeds of at least 100 ft./min., the web having colored or metallic foil over at least a portion of the printing on the substrate web, said apparatus comprising:

means for variably printing a predetermined pattern, with toner, on the substrate web while the web is traveling at speeds of at least 100 ft./min.;

an impression cylinder mounted for rotation about a first axis;

a transfer cylinder mounted for rotation about a second axis parallel to said first axis, and to define a nip between said impression cylinder and said transfer cylinder;

Appeal No. 1997-2839

Application No. 08/448,778

means for continuously feeding the substrate web to and past the nip between the transfer cylinder and impression cylinder, with the toner pattern on the substrate web facing the transfer cylinder, at speeds of at least 100 ft./min.;

means for feeding a foil strip having an adhesive, a foil, and a backing, to the nip with the adhesive and foil facing the impression cylinder;

means for taking up the foil strip backing after passage of the foil strip through the nip; and

means for heating said transfer cylinder to facilitate transfer of the adhesive and foil from the foil strip to the toner pattern on the substrate web.

Appeal No. 1997-2839  
Application No. 08/448,778

The 35 U.S.C. § 103 rejection of claim 16, 24 and 25 as  
unpatentable over Marazzi '684 or Marazzi '467 in view of  
Hanson.

The examiner explains that "Marazzi *et al.* '684 and Marazzi *et al.* '467 substantially describe the invention except for employing an ion deposition printer and web speeds of 100 ft./min. or greater" (answer, page 7). Hanson is cited for his teaching of ion deposition printers as equivalent to laser printers (answer, page 7). It is the examiner's position that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ either a laser or ion printer as suggested by Hanson (answer, page 7) and/or to adjust the feed rate of the transfer unit "to 100 ft./min. or greater, since ion deposition printers operate at such linear speeds and Marazzi *et al.* '684 expressly teach matching the speed of the transfer unit with that of the printer output" (answer, page 8). The examiner adds that "Marazzi *et al.* '684 teach feeding sheets; however, it is well known and would have been obvious to one skilled in this art to have alternatively fed a laminate foil

Appeal No. 1997-2839  
Application No. 08/448,778

in web form" (answer, page 8).<sup>6</sup>

Appellant responds that "[t]here clearly and unequivocally is no basis for one of ordinary skill in the art to completely modify the Marazzi et al '684 arrangement to provide for web printing at high speed rather than feeding it one sheet at a time at low speed merely because a printer exists per se that can operate at speeds of 100 feet per minute . . . there is nothing about Marazzi et al '684 which suggests such an apparatus is possible" (brief, page 8). We agree.

In our view, the only suggestion for modifying Marazzi '684 or Marazzi '467 in the manner proposed by the examiner to meet the above-noted limitations stems from hindsight knowledge derived from the appellant's own disclosure. The use of such hindsight knowledge to support an obviousness rejection under 35 U.S.C. ' 103 is, of course, impermissible.

See, for example, W. L. Gore and Assocs., Inc. v. Garlock,

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<sup>6</sup>The examiner also makes reference (answer, page 8) to Ranger (U.S. Patent No. 4,647,332, March 3, 1987), but without mention in the statement of the rejection. Where a reference is relied on to support a rejection, whether or not in a "minor capacity," there would appear to be no excuse for not positively including the reference in the statement of the rejection. See In re Hoch 428 F.2d 1341, 1342 n.3, 166 USPQ 406, 407 n.3 (CCPA 1970).



Appeal No. 1997-2839  
Application No. 08/448,778

Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

Marazzi '684 and Marazzi '467 simply do not teach apparatus for continuously feeding a web "at speeds of at least 100 ft./min." to the nip of two cylinders for transfer of a foil to the web's toner pattern as is called for in appellant's claims on appeal. Marazzi '684 teaches apparatus transferring foil to a

pattern at the nip of two cylinders capable of operating at speeds of commercially available printers or copiers, however this is not suggestive of an apparatus feeding a web at speeds of at least 100 ft./min. Hanson teaches ion deposition and laser printers, but does not describe printing on a continuous web at speeds of at least 100 ft./min.

For these reasons, it does not appear to us that the suggested combination of these prior art references, as proposed by the examiner, would have been obvious to one of ordinary skill in the relevant art having the references before him, or would yield the apparatus defined in appellant's claims on appeal.

It follows that we cannot sustain the examiner's

Appeal No. 1997-2839  
Application No. 08/448,778

rejection of claim 16. Likewise, the examiner's rejection of dependent claims 24 and 25 under 35 U.S.C. ' 103 is also not sustained.

The 35 U.S.C. § 103 rejection of claims 16 and 17 as unpatentable over Marazzi '684 or Marazzi '467 in view of Nelson.

Regarding the rejection of claim 16 under 35 U.S.C. ' 103 as unpatentable over Marazzi '684 or Marazzi '467 in view of Nelson, we find that Nelson does not overcome the above noted deficiencies of Marazzi '684 or Marazzi '467.

It is the examiner's contention that it would have been obvious at the time the invention was made to a person having ordinary skill in the art "to have employed a transfer foil with an adhesive layer and a preprinted receiving paper having a thermoplastic component heated prior to the transfer step, in the process taught by either Marazzi *et al.* '684 or Marazzi *et al.* '467, since Nelson recognizes the desirability of preheating an adhesive transfer foil to enhance subsequent transfer and adhesion" (answer, page 9).

Appeal No. 1997-2839  
Application No. 08/448,778

Appellant responds that "Nelson is exemplary only of the prior art over which the invention is an improvement . . . there is nothing about Nelson that would cause one of ordinary skill in the art to revise Marazzi et al, and the teachings thereof are mutually exclusive . . . [a]lso Nelson specifically teaches against the feed rate provided according to the invention" (brief, page 13).

Nelson teaches an apparatus for bonding a foil to xerographic images (col. 2, lines 39-50) and acknowledges a "dwell time" limiting the processing to from 25 to 500 inches per minute (col. 5, lines 26-41). Appellant's above mentioned claimed apparatus is for continuous printing, feeding, heating and bonding on surfaces traveling at 100 ft./min. or greater as

is specifically provided in claim 16 on appeal. We simply do not find any suggestion in any of these three references, and certainly not in the combination, of a printing and bonding apparatus operating at the high speed as claimed in appellant's claim 16.

For the above reasons, we cannot sustain the examiner's rejection of claim 16. Likewise, the examiner's rejection of

Appeal No. 1997-2839  
Application No. 08/448,778

dependent claim 17 under 35 U.S.C. ' 103 is also not sustained.

We have also reviewed the Nyfeler and Nubson references additionally applied in the other respective rejections of claims 18-23 and 26-35, but find nothing therein which makes up for the deficiencies of Hanson, Nelson, Marazzi '684 and/or Marazzi '467, discussed above. Accordingly, we cannot sustain the examiner's respective rejection of appealed claims 18-23 and 26-35 under 35 U.S.C. ' 103.

Appeal No. 1997-2839  
Application No. 08/448,778

CONCLUSION

To summarize, the decision of the examiner to reject  
claims 16 through 35 under 35 U.S.C. ' 103 is reversed.

REVERSED

BRUCE H. STONER, JR.	)	
Chief Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
IRWIN CHARLES COHEN	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
RICHARD B. LAZARUS	)	
Administrative Patent Judge	)	

Appeal No. 1997-2839  
Application No. 08/448,778

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